Unit 3: Logic and Reasoning Lesson 3.2

Game On!

(2)   1.   Give an example of a conclusion that is drawn using

     a.   inductive reasoning

     _____

     _____

     b.   deductive reasoning

     _____

     _____

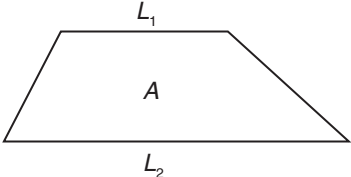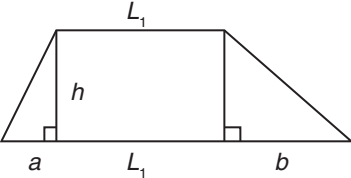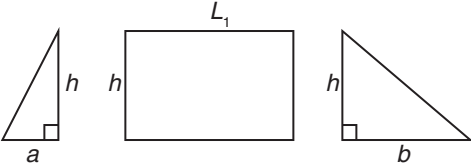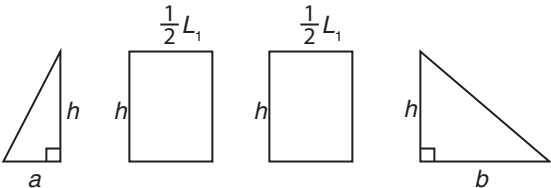(3)   2.   Consider the following set of statements.

- People are happy when they receive a present. Darragh is happy. She must have received a present.

     a.   Explain why the conclusion is not correct based on the given information.

     _____

     _____

     _____

     b.   Is the conclusion correct if the statements are changed to the following? Explain.

- People are happy when they receive a present. Darragh received a present. She must be happy.

     _____

     _____

     _____

④   3.   Use the diagrams and information provided to complete the proof that the area of a trapezoid is $\dfrac{h(L_1 + L_2)}{2}$.

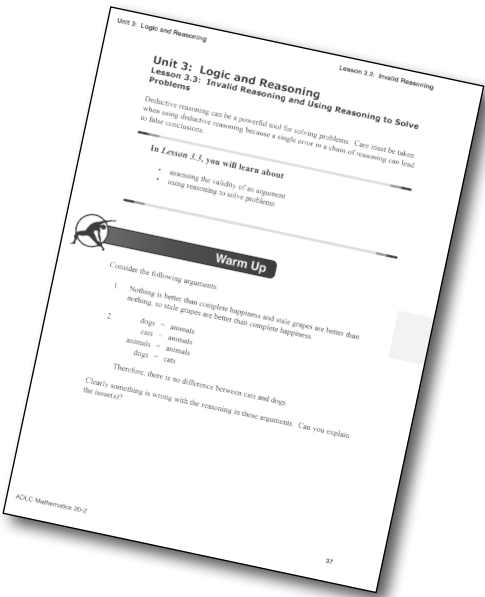| Diagrams and Information	Explanation
$A = \dfrac{h(L_1 + L_2)}{2}$	Hint: The sum of the areas of the smaller pieces will equal the area of the trapezoid. Your explanation will need to use the fact that $L_2 = L_1 + a + b$ as shown in the second diagram.

④   4.   Consider the following conjecture:

- The sum of two even numbers will be even.

a. Give three examples supporting the conjecture.

b. Prove the conjecture.

/13

You have completed *Lesson 3.2 Game On!.* Please review all work in *Workbook 3A* to ensure it is your best work. Submit *Workbook 3A* for marking at this time and proceed to *Lesson 3.3* in the *Module*.

End Of Workbook 3A